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EXAMINER

PHUNKULH, BOB A

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PASCAL AGIN

Appeal 2008-1675
Application 09/878,269
Technology Center 2600

Decided: July 17, 2008

Before MAHSHID D. SAADAT, JOHN A. JEFFERY, and CARLA M.
KRIVAK, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's
rejection of claim 45. Claims 26-44 and 46-57 have been indicated as

containing allowable subject matter.¹ We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

Appellant invented a mobile station that controls transmission power as a function of a transmission quality target value. Specifically, when there is a variation in a target value, the mobile station changes the data channel transmission power in anticipation of a variation in the transmission power of the data or control channel or a variation in the offset of the transmission power of the control channel relative to the transmission power of the data channel.² This adjustment corrects for interruptions during transmission gaps. Claim 45 reads as follows:

45. A mobile station wherein a transmission power control algorithm simultaneously controls the transmission power of at least two channels, including a data channel and a control channel, as a function of transmission quality target value, with the transmission power of said control channel offset relative to the transmission power of said data channel, said mobile station comprising:

means for applying, in the event of target value variation, anticipated variations of at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel, to obtain an anticipated variation of the data channel transmission power.

The Examiner relies on the following prior art reference to show unpatentability:

¹ See Box 2 of the Notice of Panel Decision from Pre-Appeal Brief Review mailed December 27, 2006.

² See *generally* Spec. 1:15-2:14, 8:30-9:33, 16:26-17:20, and 18:6-26:24.

The Examiner's rejection is as follows:

Claim 45 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Baker.

Rather than repeat the arguments of Appellant or the Examiner, we refer to the Briefs³ and the Answer⁴ for their respective details. In this decision, we have considered only those arguments actually made by Appellant. Arguments, which Appellant could have made but did not make in the Briefs, have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

OPINION

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628, 631 (Fed. Cir. 1987). The dispositive issue in this appeal turns on whether Baker discloses a mobile station with a:

means for applying, in the event of target variation, anticipated variations of at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel, to obtain an anticipated variation of the data channel transmission power

³ We refer to the Appeal Brief filed April 9, 2007, and the Reply Brief filed September 23, 2007, throughout this opinion.

⁴ We refer to the most recent Examiner Answer mailed September 10, 2007, throughout this opinion.

as recited in claim 45. The Examiner finds that Baker discloses the above and all other limitations recited in claim 45 (Ans. 3-4). Appellant argues that Baker does not disclose: (1) a means for applying a variation of the transmission power level; (2) the applied anticipated variation is in response to a variation of the target value; and (3) the applied adjustment obtains an anticipated variation of the data channel transmission power (App. Br. 9-11).

At the outset, we note that neither Appellant nor the Examiner indicates whether the “means for” language found in claim 45 invokes 35 U.S.C. § 112, ¶ 6. We find 35 U.S.C. § 112, ¶ 6 has been invoked with respect to claim 45. When a claim uses “means for” language, there is a presumption that the claim invokes 35 U.S.C. § 112, ¶ 6. *See Biomedino L.L.C. v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007). As such, these limitations shall be construed to cover the corresponding structure described in the specification and its equivalents. *In re Donaldson Co., Inc.*, 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc). As the Specification describes the means for applying anticipated variations of the transmission power or the offset in various sections (Spec. 21:27-22:29 and 24:31-26:17; Figs. 4-6), the limitation shall be construed to cover the structure described in the above portions of the Specification and its equivalents that corresponds to the recited function.

Appellant disputes that Baker discloses a “means for applying . . . anticipated variations of at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel.” Specifically, Appellant argues that Baker teaches applying or adjusting a step size if the comparison between the target value

and the actual value is too large. In Appellant's view, this adjustment of the step sizes is not a means for applying anticipated variations of the transmission power or the offset as claimed (App. Br. 9-10).

Baker discloses a mobile station that controls the transmission power of the data and control channel in response to the power control commands. Additionally, Baker discloses a means for setting the initial transmission power of the control and data channels to the power before an interruption adjusted by an offset (Baker, col. 1, ll. 6-22, col. 1, l. 57 – col. 2, l. 2, and col. 7, ll. 37-45). As explained by the Examiner (Ans. 4-5), this setting or adjustment of the data and control channel transmission power from the value of the preceding transmission power can be “even before receipt of any valid power control command” (Baker, col. 5, ll. 9-10). Moreover, Baker describes the power interruption means for setting the power at the start of transmission and after an interruption may be determined dynamically (Baker, col. 5, ll. 8-14). Thus, Baker clearly teaches a means for applying adjustments to the transmission power of the data channel in anticipation of the scheduled power control command or anticipated adjustments or steps.

Appellant argues, however, the disclosed “steps” in Baker are not variations of the transmission power of the data or control channel as recited in claim 45 (App. Br. 9). We disagree. First, the Specification does not limit the means for applying the anticipated variation of the transmission power of the data or control channel to a single application. In fact, the Specification broadly identifies the means for applying the anticipated variations by providing examples (*See e.g.*, “two methods can be used to apply anticipated variations of the transmission power to data and control

channels” (Spec: 21:27-29) and “by way of example” (Spec. 24:31 and 25:23-24)). Because the corresponding structure in the Specification does not limit the means for applying the variation of transmission power to a single application, the recited “means for applying . . . variations” can fairly be construed to read on structures that apply variations of the transmission power of the data or control channel through as series of adjustments or steps.

Second, Baker provides an example of power adjustments after an interruption or when the transmission power of the data and control channels has changed or varied because of the interruption (Baker, col. 4, ll. 29-67 and col. 5, ll. 8-14). Baker calculates this adjustment by first determining the difference between the received and targeted power and then offsetting this value (Baker, col. 1, l. 67 – col. 2, l. 2, col. 2, ll. 42-51 and col. 5, l. 30–col. 6, l. 4). This offset in Baker also compensates for the variation in the transmission power from before and after the interruption. Baker then dynamically applies steps or variations that represent the change in the transmission power (Baker, col. 4, ll. 33 – col. 5, l. 7). As Baker shows, the steps eventually approach the target transmission power of a channel (e.g., from about $T=4-12$ ms in Fig. 5) and represent the anticipated variation of at least one of the transmission power of the data or control channel (Baker, col. 6, ll. 15-56 and Figs. 5-6). Thus, based on the initial calculation, Baker includes a means for performing the function of applying projected or anticipated variations of at least one of the transmission power of the data or control channel and obtaining a projected or anticipated variation of the data channel as a result. Contrary to Appellant’s assertion, Baker, therefore, does include a means for applying an anticipated variation of the transmission

power of the data or control channel to obtain an anticipated variation of the data channel transmission power, as recited in claim 45.

Appellant further contends the variation in Baker is not in response to a variation of the target value or “in the event of target value variation”⁵ as recited (App. Br. 10-11; Reply Br. 2-3). The Specification provides no particular definition for the phrase, “target value variation,” and does not limit the term to the examples in the Specification (*See* Spec. 17:18-20 and 18:7-8, stating the target value variation “can” be determined). We will, therefore, give the term, “target value variation,” its broadest reasonable construction in light of the specification. *In re Am. Acad. Of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

Baker discusses the anticipated power control adjustments at the start or at the initiation of the transmission can be determined by using information related to the rate of change of the channel attenuation derived from the receiver measurements (Baker, col. 5, ll. 8-14). We consider the described channel attenuation in Baker to be a threshold or a target value from which Baker then calculates a rate of change in channel attenuation. Moreover, Baker discloses making adjustments using information related to the rate of change or variation of the channel attenuation. Thus, Baker applies anticipated variations of transmission power, as discussed above, in the event of this rate of change of channel attenuation or target value variation. Baker, thus, discloses a means for applying variations of the

⁵ We concur with Appellant that this limitation should be construed as a variation of the target value (Reply Br. 2) and not a variation from the target value as the Examiner states (Ans. 4).

transmission power of the data and control channel “in the event of target value variation” as recited.

To conclude, Baker fully meets the limitation of “means for applying, in the event of target value variation, anticipated variations of at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel, to obtain an anticipated variation of the data channel transmission power” and therefore, anticipates claim 45.

DECISION

In summary, we conclude that Appellant has not shown that the Examiner erred in rejecting claim 45 as being anticipated by Baker. The decision of the Examiner rejecting claim 45 is affirmed.

No period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2006).

Appeal 2008-1675
Application 09/878,269

AFFIRMED

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